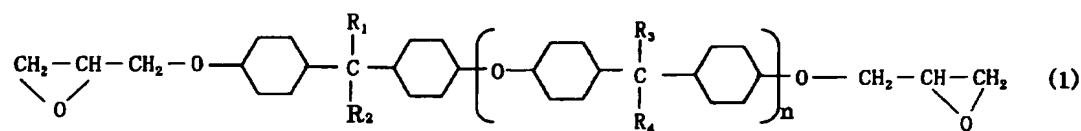


CLAIMS

1. A neutron shielding material composition comprising a hydrogenated bisphenol resin, a curing agent component, a density-increasing agent and a boron compound.

2. A neutron shielding material composition comprising a hydrogenated bisphenol epoxy represented by the following structural formula (1):

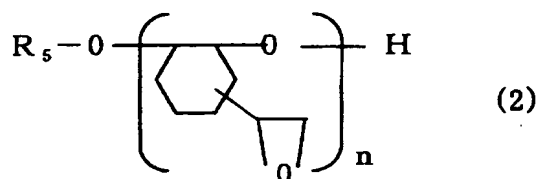


wherein each of R₁ to R₄ is independently selected from the group consisting of CH₃, H, F, Cl and Br, and n is from 0 to 2;

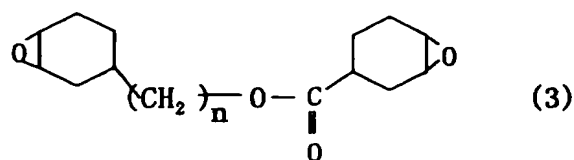
a curing agent component having at least one ring structure and a plurality of amino groups;

a density-increasing agent; and a boron compound.

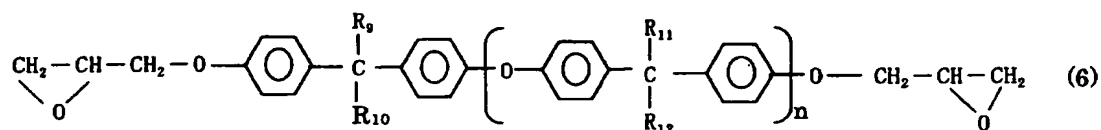
3. The neutron shielding material composition according to claim 1 or 2, further comprising one or more compounds selected from the group consisting of a compound represented by the structural formulas (2), (3), (6) and (9):



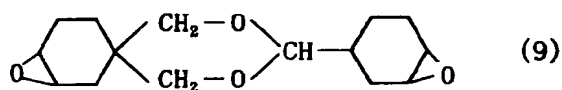
wherein R₅ is a C₁₋₁₀ alkyl group or H, and n is from 1 to 24;



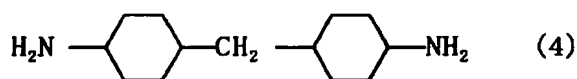
wherein n is from 1 to 8;



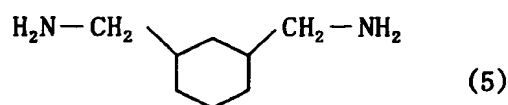
wherein each of R₉ to R₁₂ is independently selected from the group consisting of CH₃, H, F, Cl and Br, and n is from 0 to 2; and



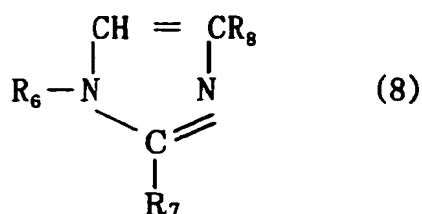
4. The neutron shielding material composition according to any of claims 1 to 3, comprising, as the curing agent component, a compound represented by the structural formula (4):



5. The neutron shielding material composition according to any of claims 1 to 4, wherein the curing agent component comprises one or more of compounds represented by the structural formulas (5) and (8):



and



wherein R_6 , R_7 and R_8 each is independently a C_{1-18} alkyl group or H.

- 5 6. The neutron shielding material composition according to any of claims 1 to 5,
further comprising a filler.
7. The neutron shielding material composition according to any of claims 1 to 6,
further comprising a refractory material.
- 10 8. The neutron shielding material composition according to claim 7, wherein the
refractory material comprises at least one of magnesium hydroxide and aluminum
hydroxide.
- 15 9. The neutron shielding material composition according to any of claims 1 to 8,
wherein the density-increasing agent is a metal powder having a density of 5.0 to
22.5 g/cm³, a metal oxide powder having a density of 5.0 to 22.5 g/cm³, or a
combination thereof.
- 20 10. A neutron shielding material obtainable from the neutron shielding material
composition according to any of claims 1 to 9.

11. A neutron shielding container obtainable from the neutron shielding material composition according to claim 10.